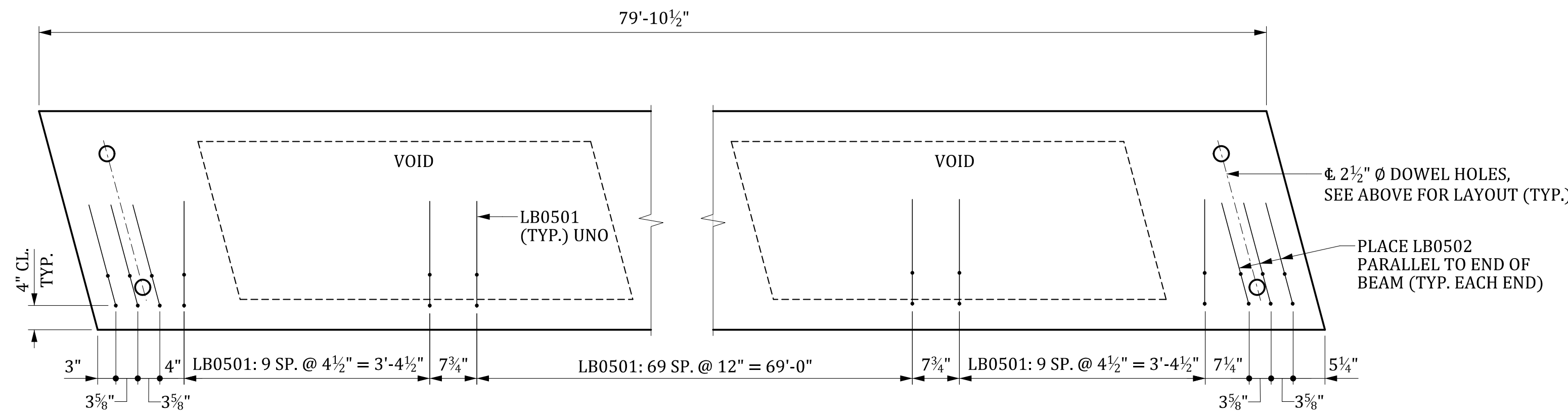


⊗ LONG LEG AT TOP OF BEAM
 ⊗ FOR REINFORCEMENT, SEE "PRESTRESSED CONCRETE BOX BEAM 80' SPAN - DETAILS 2 OF 2" SHEET.

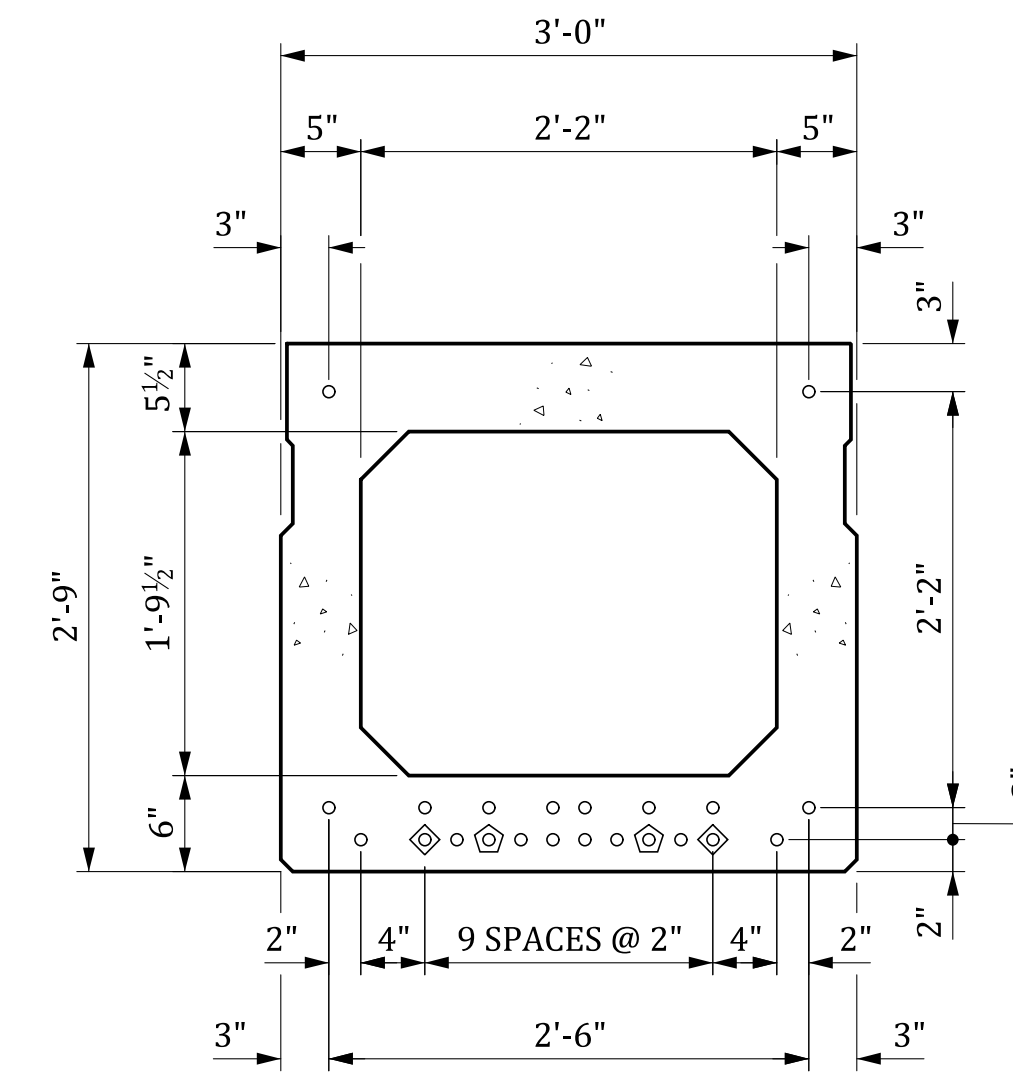
PARTIAL PLAN OF BEAM

STRANDS NOT SHOWN.
 INTERIOR BEAM SHOWN, EXTERIOR BEAM SIMILAR EXCEPT BARRIER REINFORCEMENT. SEE BELOW.



PARTIAL PLAN OF EXTERIOR BEAM

SHOWING PLACEMENT OF "LB05" BARS FOR MASH BARRIER PARAPET.
 "LB05" BARS MAY BE SHIFTED SLIGHTLY TO AVOID STIRRUPS.



STRAND LAYOUT

INTERIOR BEAM SHOWN - EXTERIOR BEAM SIMILAR EXCEPT SHEAR KEY LOCATION.

DESIGN DATA	
STRANDS:	0.6"Ø LOW RELAX. GRADE 270
	AREA=0.217 SQ. IN.
	TENSIONING LOAD = 43.9 KIPS
CONCRETE:	f'c = 7.0 KSI
	f'ci = 5.0 KSI

- FULLY BONDED STRANDS
- ◊ DEBONDED STRANDS FOR 4'-0" FROM END OF BEAM
- ◊ DEBONDED STRANDS FOR 10'-0" FROM END OF BEAM

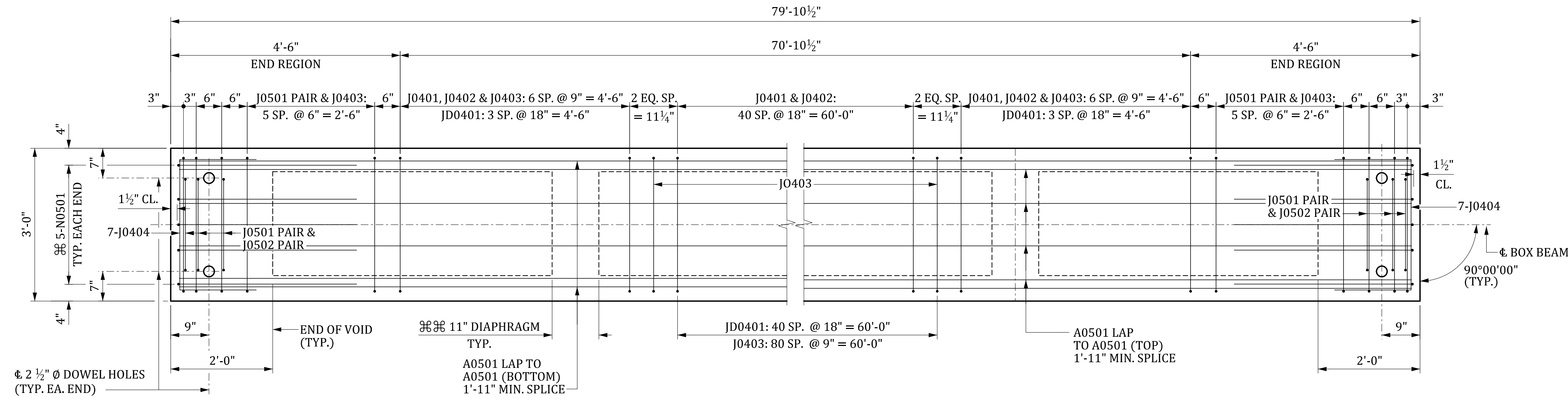
NOTE:
 BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM THE END OF THE BOX BEAM. SEE NOTES ON "PRESTRESSED CONCRETE BOX BEAM TYPICAL SUPERSTRUCTURE SECTION" SHEET.

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 80' SPAN - DETAILS 1 OF 2 (-15° SKEW)	
COUNTY: ####	ROUTE: ####

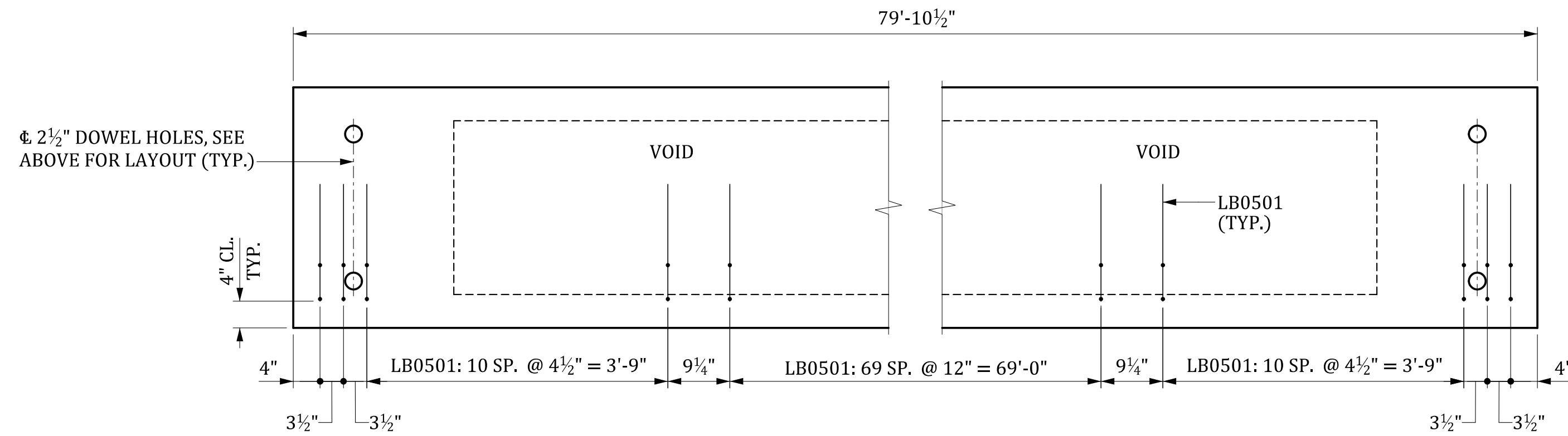
THIS DRAWING IS FURNISHED FOR INFORMATION ONLY. ALL DIMENSIONS SHOWN ARE SHEET SPECIFIC. ANY USE OF THIS DESIGN AND DRAWING, INCLUDING DIMENSIONS, MUST BE CHECKED BY THE USER'S ENGINEER TO ENSURE DESIGN IS ADEQUATE FOR THE INTENDED USE. ALL DRAWINGS MUST BE SIGNED AND SEALED BY A SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER WHEN USED.



⊘ LONG LEG AT TOP OF BEAM
 ⊘⊘ FOR REINFORCEMENT, SEE "PRESTRESSED CONCRETE BOX BEAM 80' SPAN - DETAILS 2 OF 2" SHEET.

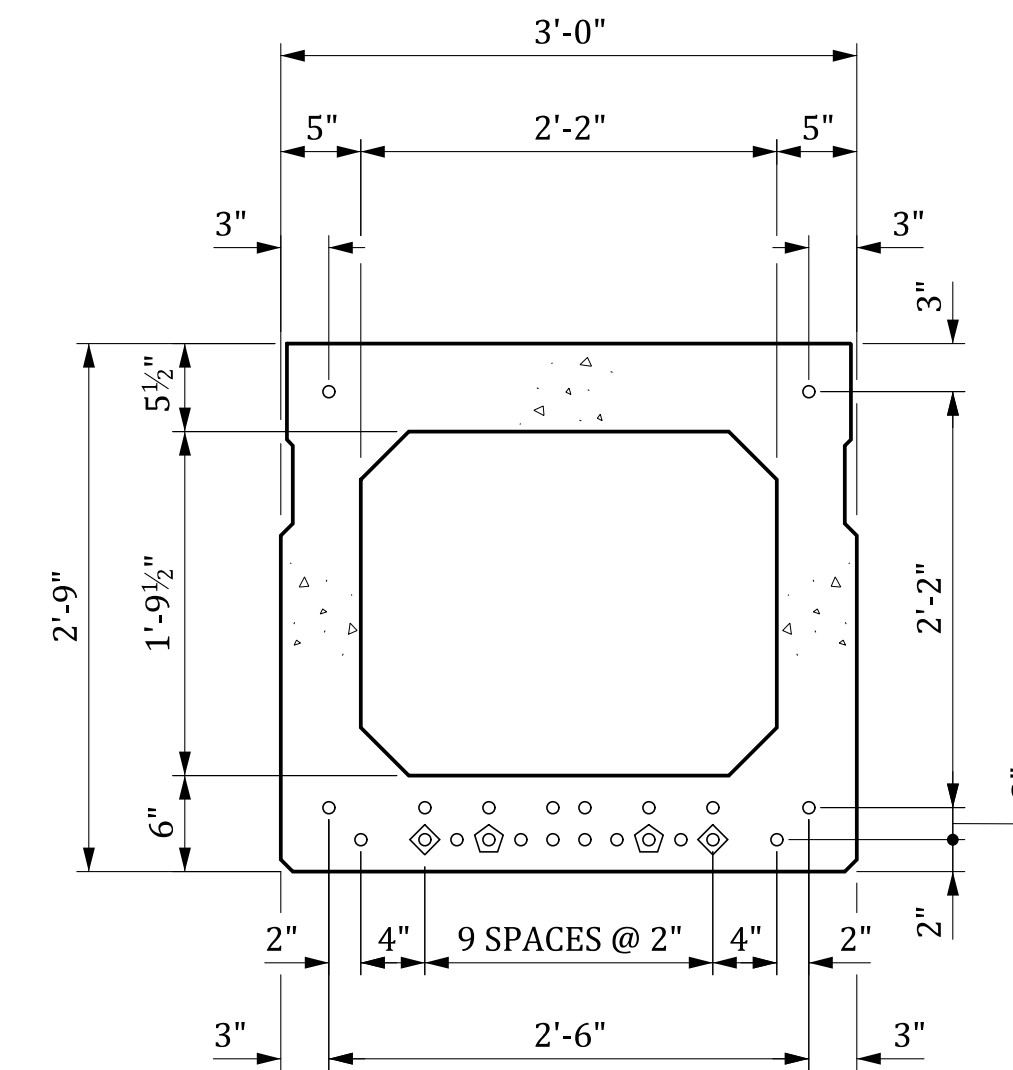
PARTIAL PLAN OF BEAM

STRANDS NOT SHOWN.
 INTERIOR BEAM SHOWN, EXTERIOR BEAM SIMILAR EXCEPT BARRIER REINFORCEMENT. SEE BELOW.



PARTIAL PLAN OF EXTERIOR BEAM

SHOWING PLACEMENT OF LB0501 BARS FOR MASH BARRIER PARAPET.
 LB0501 BARS MAY BE SHIFTED SLIGHTLY TO AVOID STIRRUPS.



STRAND LAYOUT

INTERIOR BEAM SHOWN - EXTERIOR BEAM SIMILAR EXCEPT SHEAR KEY LOCATION.

DESIGN DATA

STRANDS:
 0.6"Ø LOW RELAX. GRADE 270
 AREA=0.217 SQ. IN.
 TENSIONING LOAD = 43.9 KIPS

CONCRETE:
 $f'_c = 7.0$ KSI
 $f'_{ci} = 5.0$ KSI

- FULLY BONDED STRANDS
- ⊘ DEBONDED STRANDS FOR 4'-0" FROM END OF BEAM
- ⊘ DEBONDED STRANDS FOR 10'-0" FROM END OF BEAM

NOTE:
 BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE NOTES ON "PRESTRESSED CONCRETE BOX BEAM TYPICAL SUPERSTRUCTURE SECTION" SHEET.

MBreeland 6/25/2024 5:05:06 PM 704_ABB_80_DTL.dgn

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

CONSULTANT NAME/LOGO

SOUTH CAROLINA
 DEPARTMENT OF TRANSPORTATION

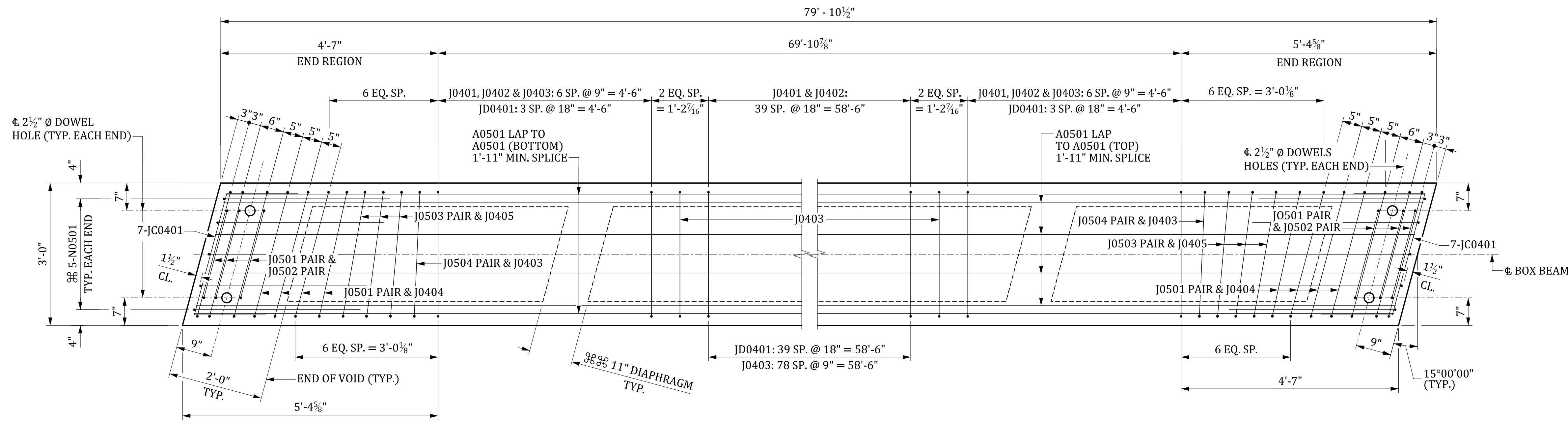
PRESTRESSED CONCRETE BOX BEAM
80' SPAN - DETAILS 1 OF 2
 (0° SKEW)

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COUNTY: ####

ROUTE: ####

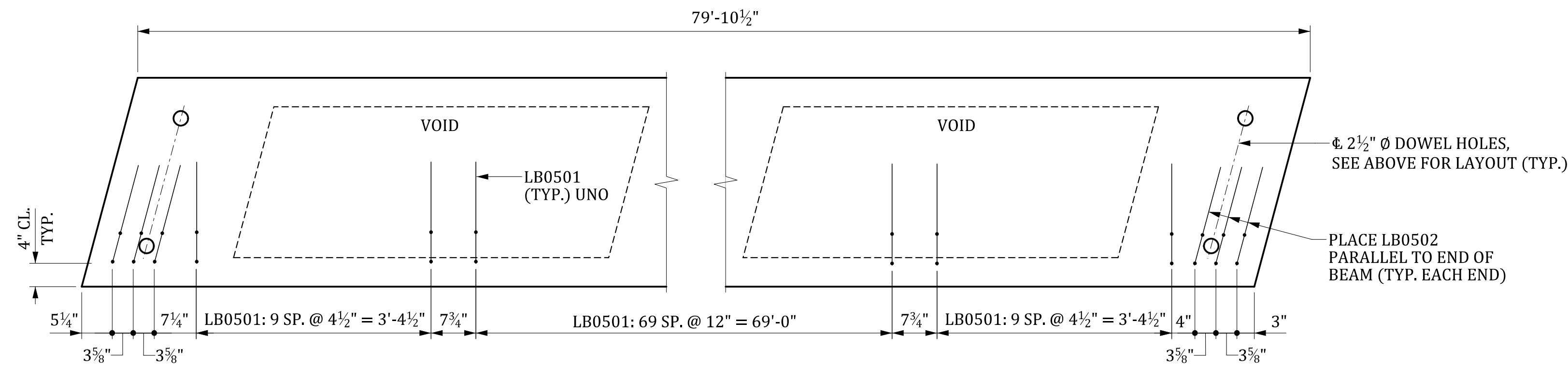
DRAWING NUMBER: 704-ABB.S080.SK000.D01



⌘ LONG LEG AT TOP OF BEAM
 ⌘ FOR REINFORCEMENT, SEE "PRESTRESSED CONCRETE BOX BEAM 80' SPAN - DETAILS 2 OF 2" SHEET.

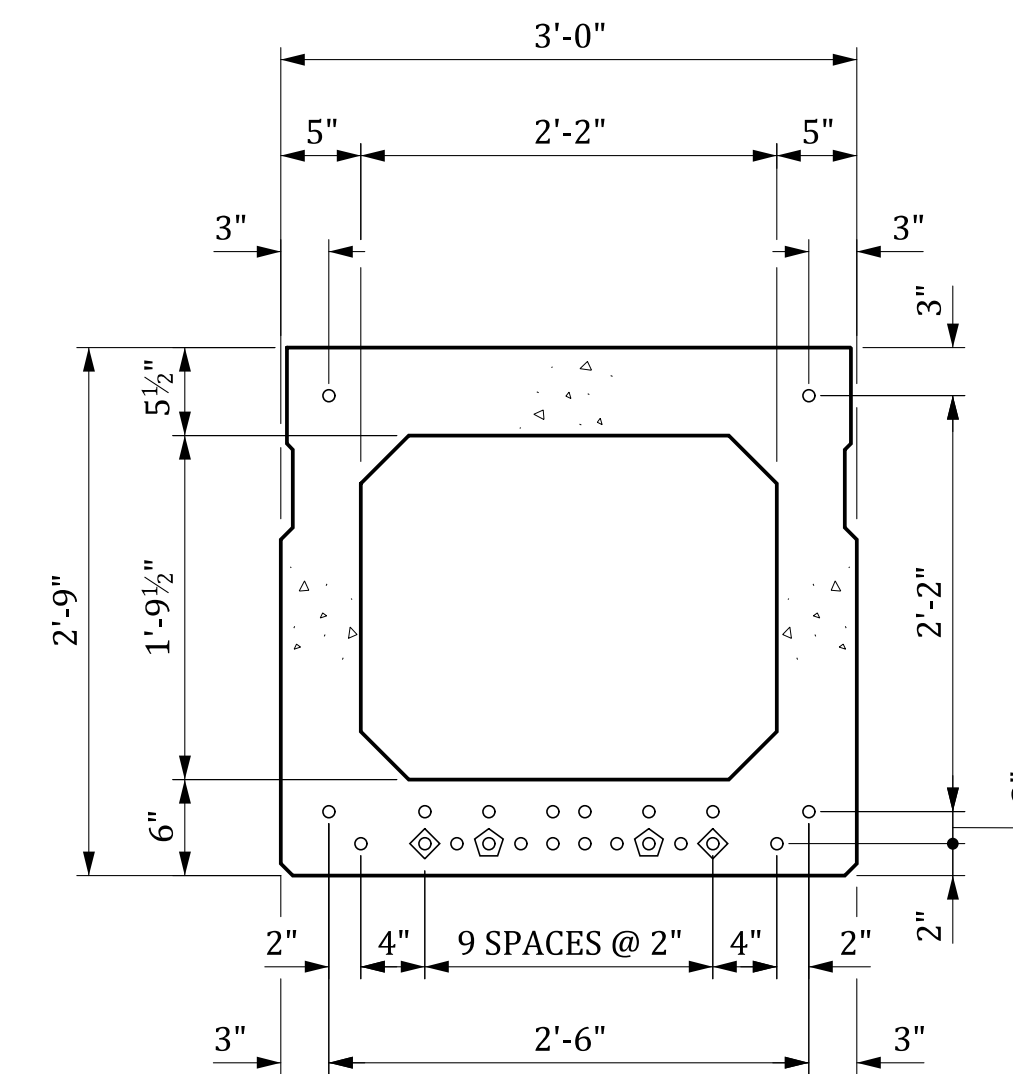
PARTIAL PLAN OF BEAM

STRANDS NOT SHOWN.
 INTERIOR BEAM SHOWN, EXTERIOR BEAM SIMILAR EXCEPT BARRIER REINFORCEMENT. SEE BELOW.



PARTIAL PLAN OF EXTERIOR BEAM

SHOWING PLACEMENT OF "LB05" BARS FOR MASH BARRIER PARAPET.
 "LB05" BARS MAY BE SHIFTED SLIGHTLY TO AVOID STIRRUPS.



STRAND LAYOUT

INTERIOR BEAM SHOWN - EXTERIOR BEAM SIMILAR EXCEPT SHEAR KEY LOCATION.

DESIGN DATA	
STRANDS:	0.6"Ø LOW RELAX. GRADE 270 AREA=0.217 SQ. IN. TENSIONING LOAD = 43.9 KIPS
CONCRETE:	f'c = 7.0 KSI f'ci = 5.0 KSI

- FULLY BONDED STRANDS
- ◇ DEBONDED STRANDS FOR 4'-0" FROM END OF BEAM
- ⊙ DEBONDED STRANDS FOR 10'-0" FROM END OF BEAM

NOTE:
 BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE NOTES ON "PRESTRESSED CONCRETE BOX BEAM TYPICAL SUPERSTRUCTURE SECTION" SHEET.

MBreeland 6/25/2024 5:05:04 PM 704_ABB_80_DTL.dgn				
REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

CONSULTANT NAME/LOGO

SOUTH CAROLINA
 DEPARTMENT OF TRANSPORTATION

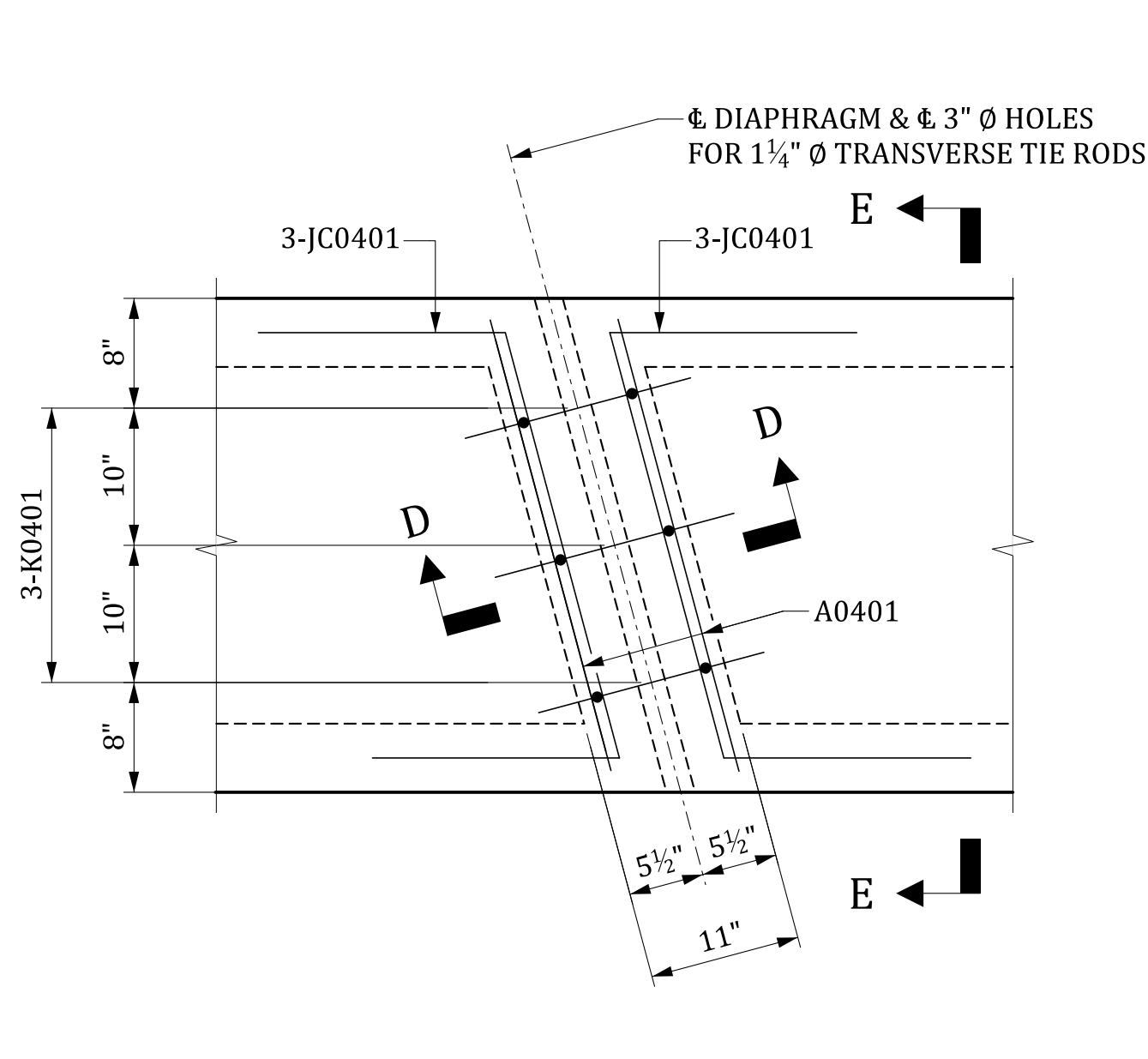
PRESTRESSED CONCRETE BOX BEAM
80' SPAN - DETAILS 1 OF 2
 (+15° SKEW)

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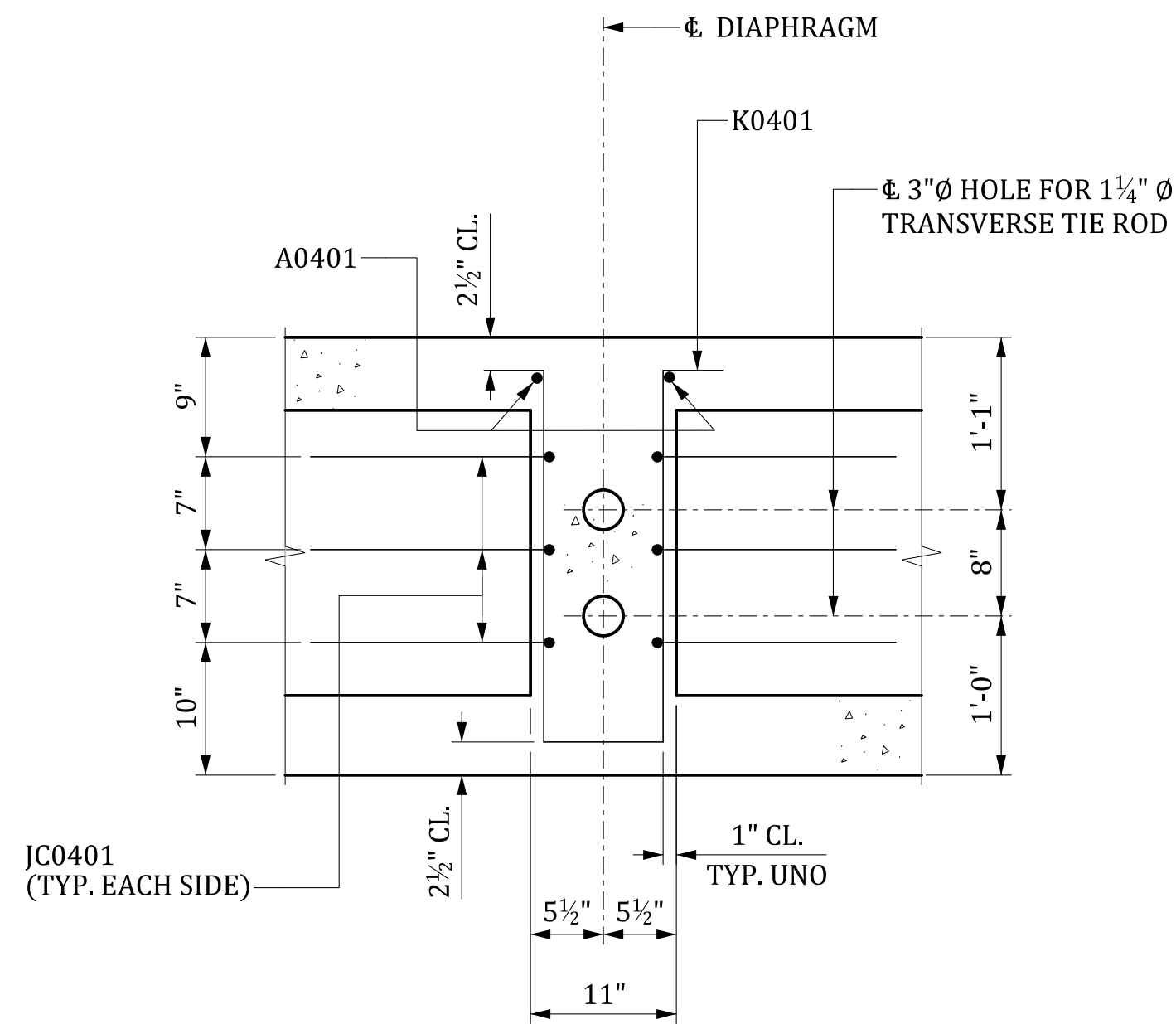
COUNTY: ####

ROUTE: ####

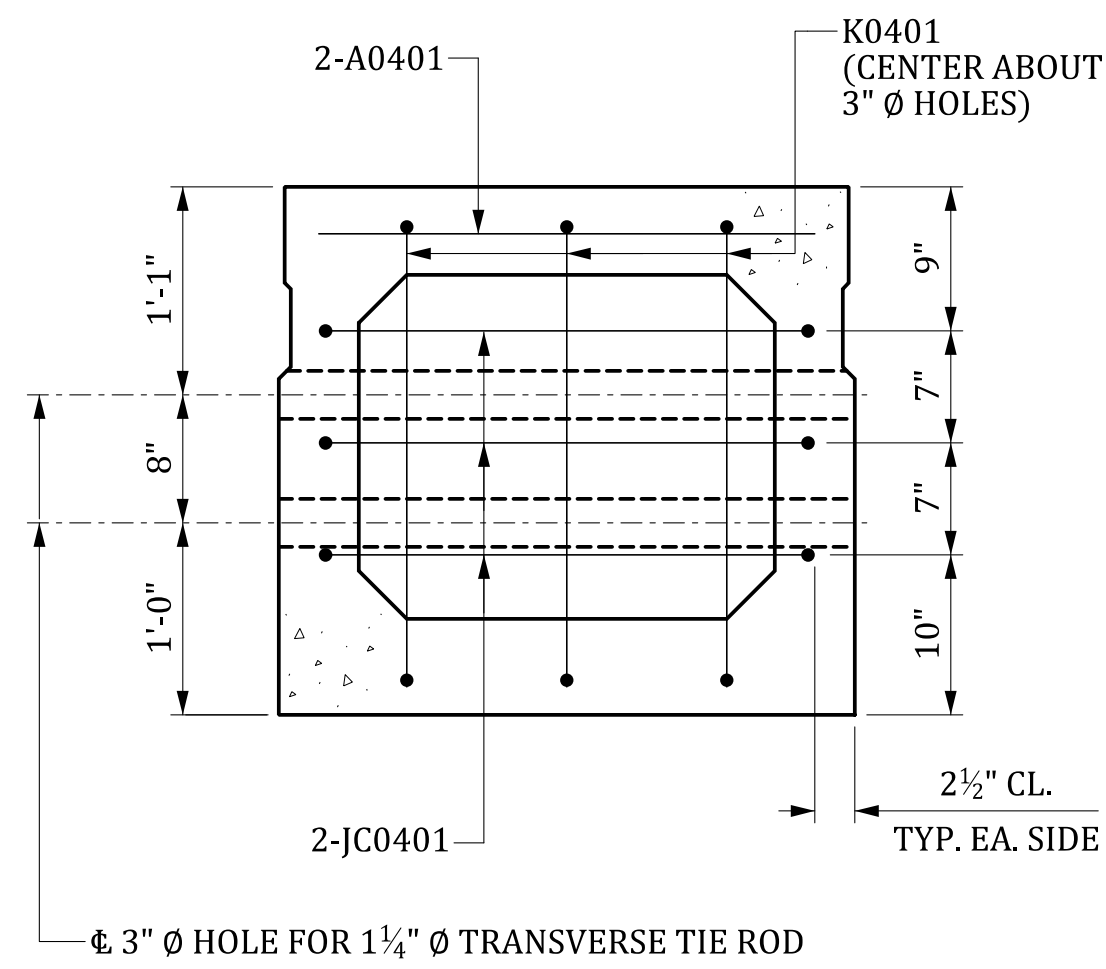
DRAWING NUMBER: 704-ABB.S080.SK015.D01



PLAN



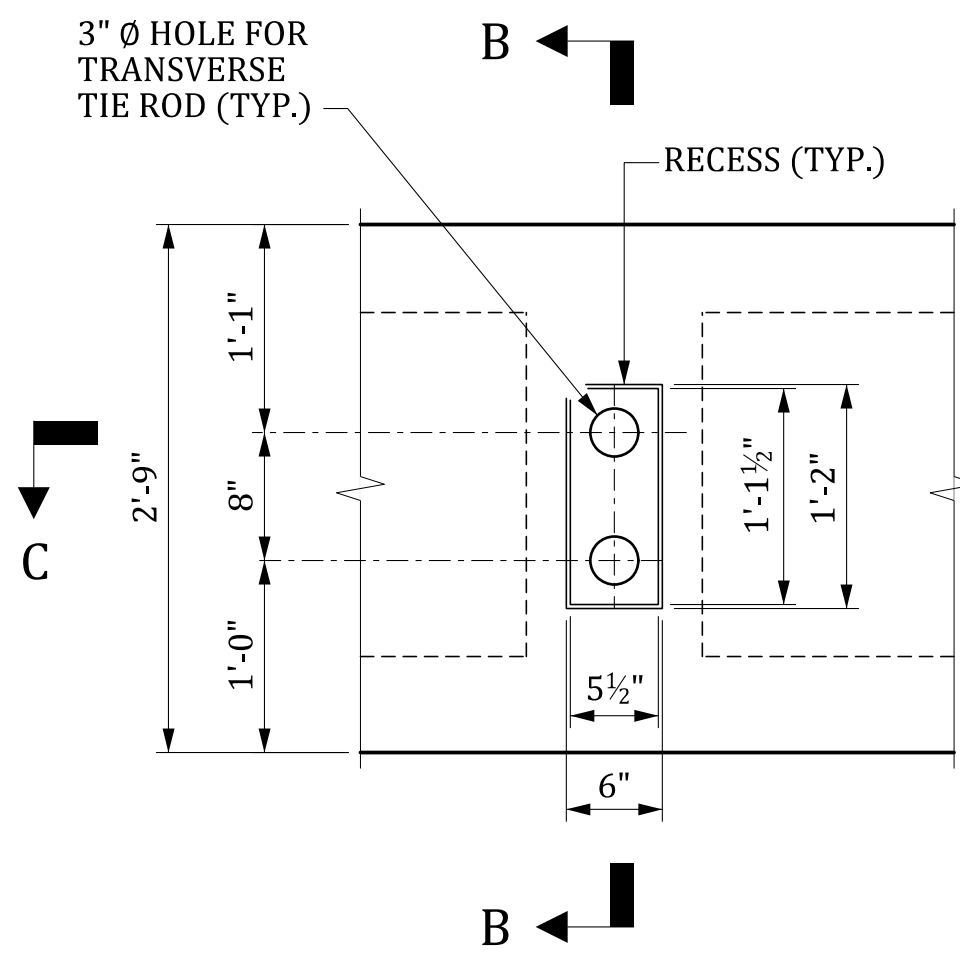
SECTION D-D



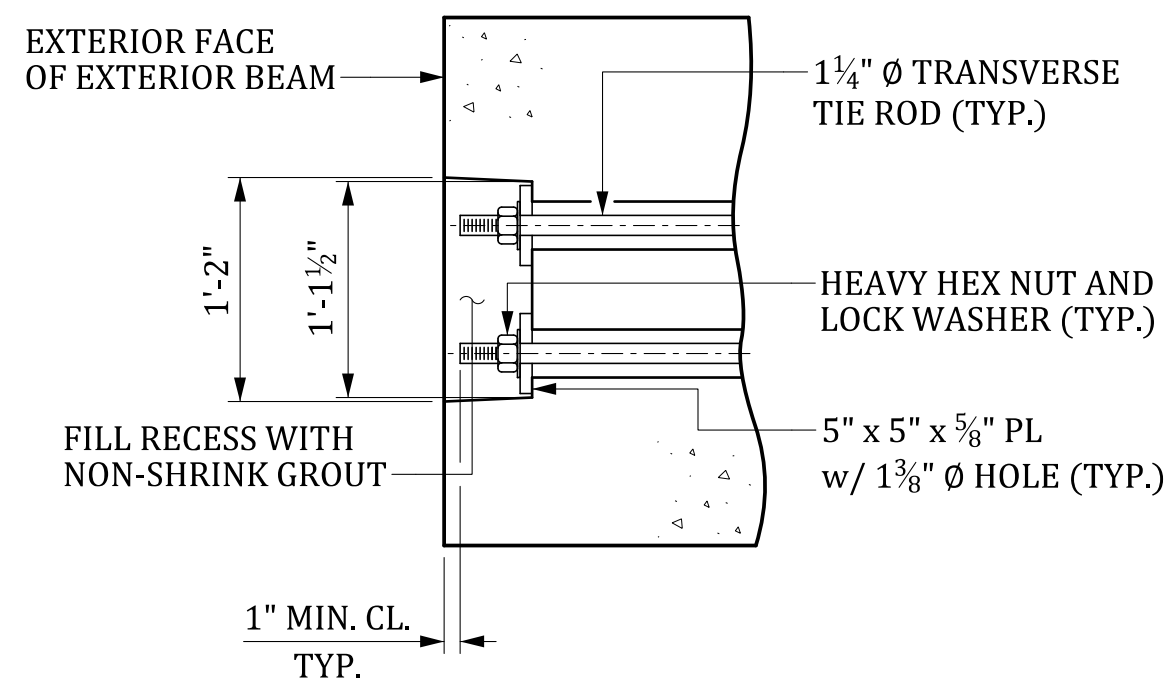
SECTION E-E

DIAPHRAGM DETAILS

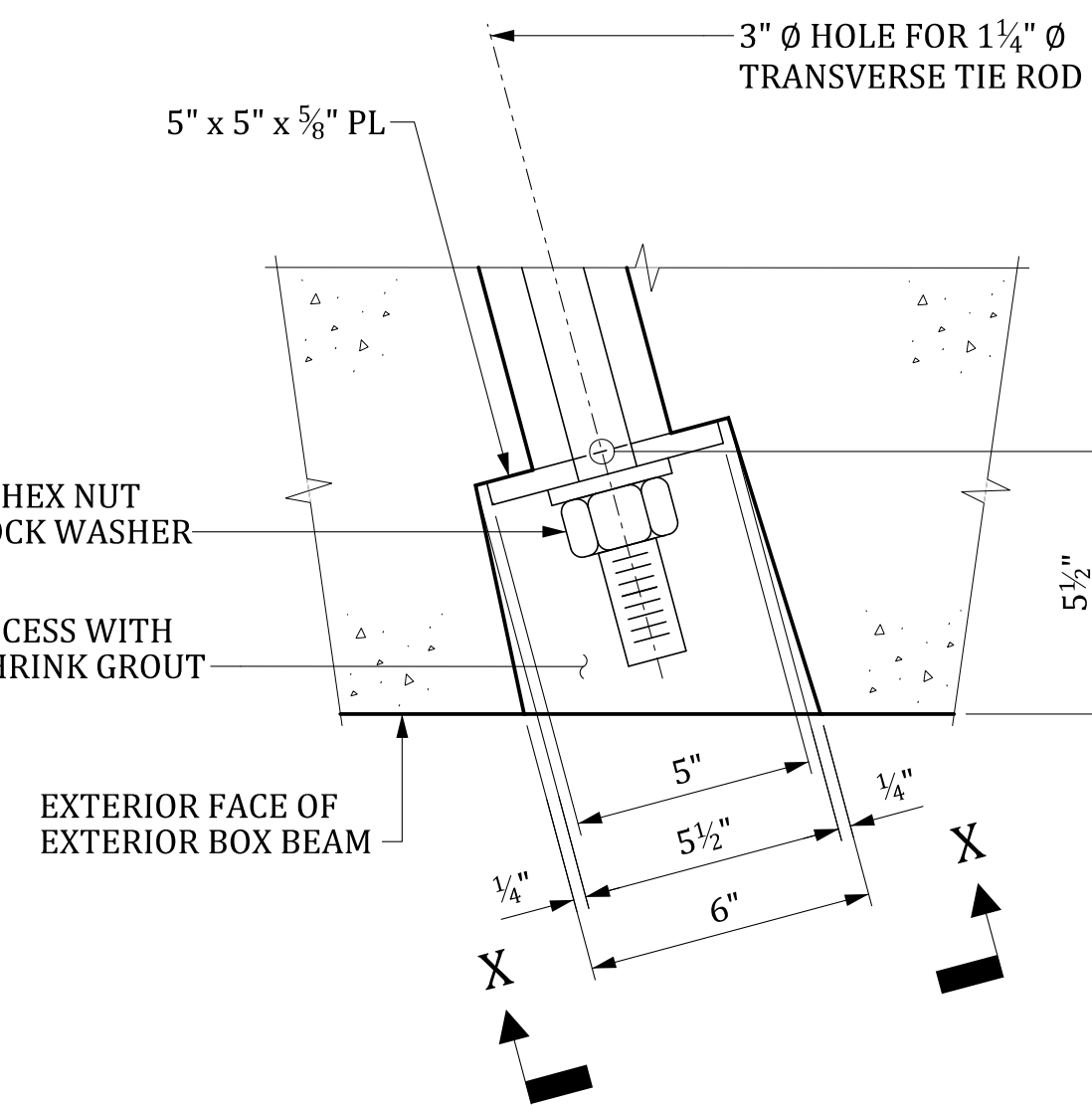
INTERIOR BOX BEAM SHOWN. SEE "TIE ROD POCKET" DETAIL BELOW FOR EXTERIOR FACE OF EXTERIOR BOX BEAM.



VIEW X-X
TIE ROD ASSEMBLIES NOT SHOWN



SECTION B-B



SECTION C-C

TIE ROD POCKET DETAIL

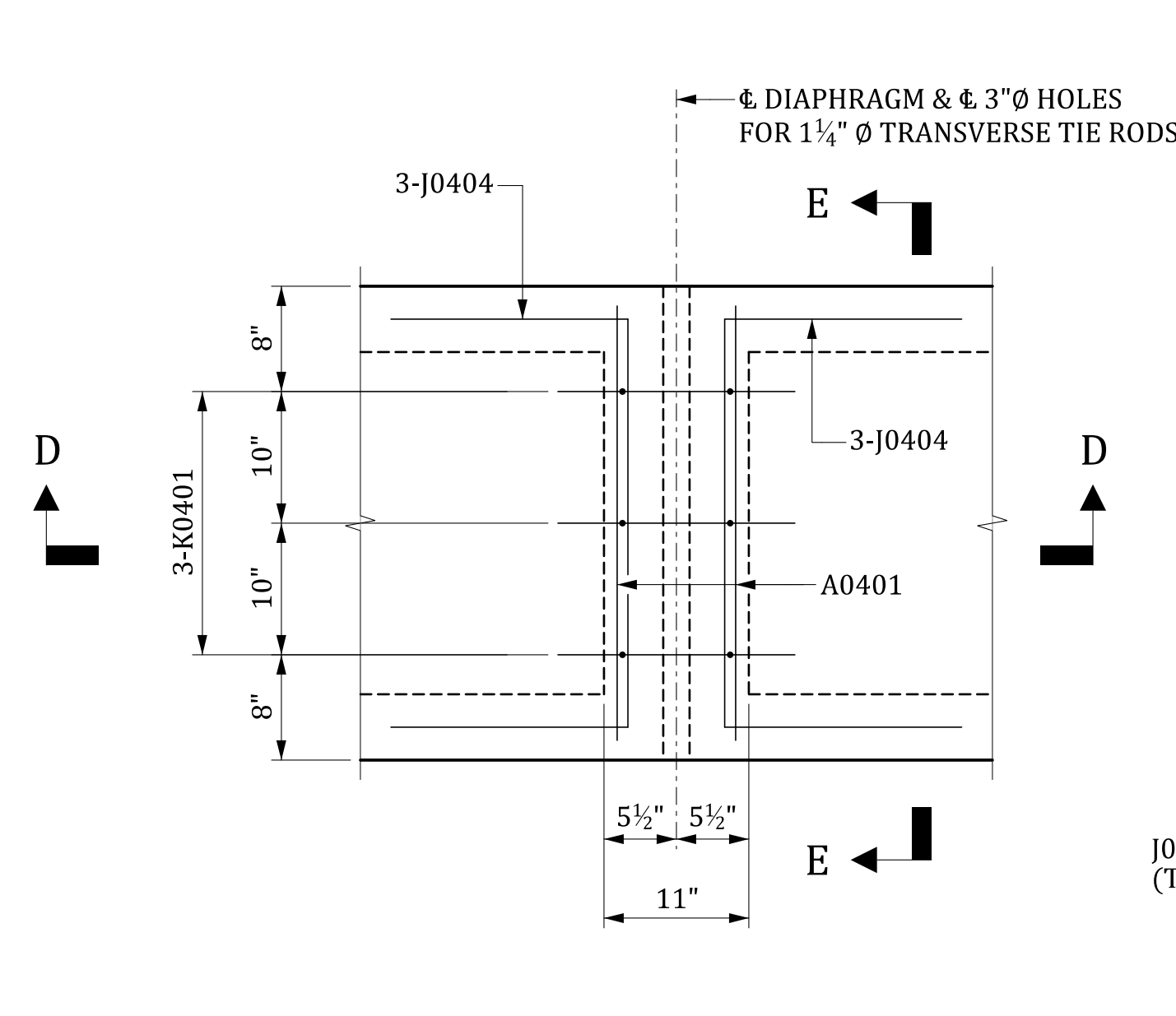
EXTERIOR FACE OF EXTERIOR BEAM

MBreeland 6/25/2024 5:05:03 PM 704-ABB_80_DTLS.dgn				
REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

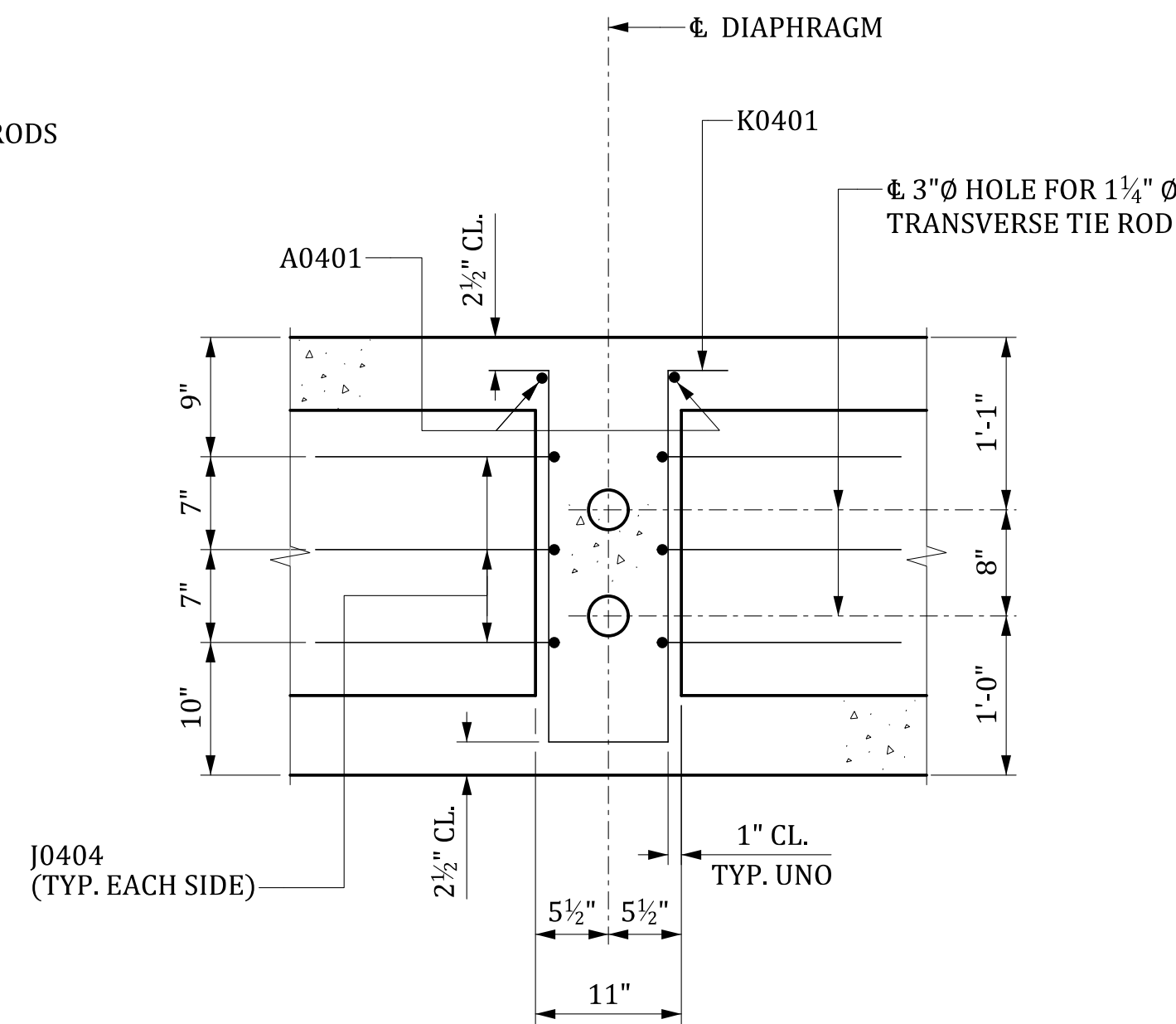
REVIEWED	GCM	MWB	10-23
QUAN.	GCM	MWB	10-23
DR.	OP	WSA	09-23
DES.	BY	CHK.	DATE

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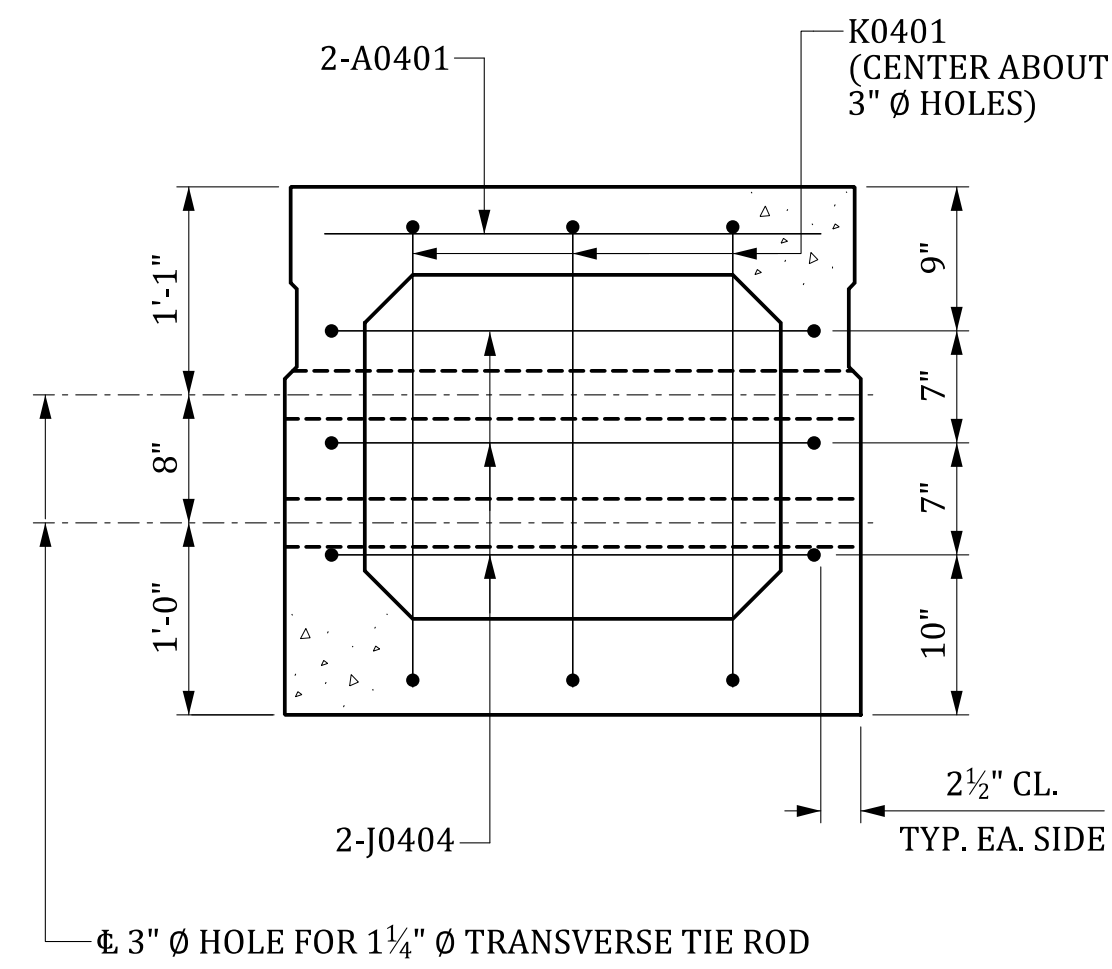
CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 80' SPAN - DETAILS 2 OF 2 (-15° SKEW)	
COUNTY: ####	ROUTE: ####



PLAN



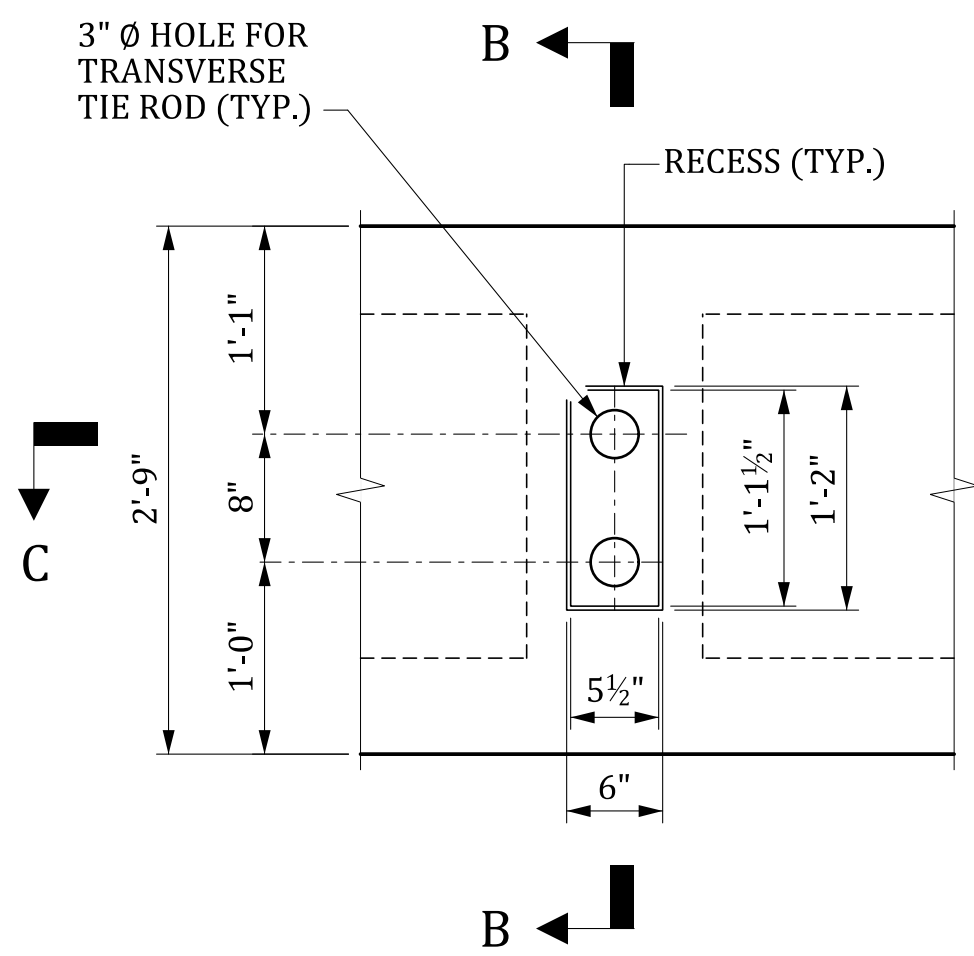
SECTION D-D



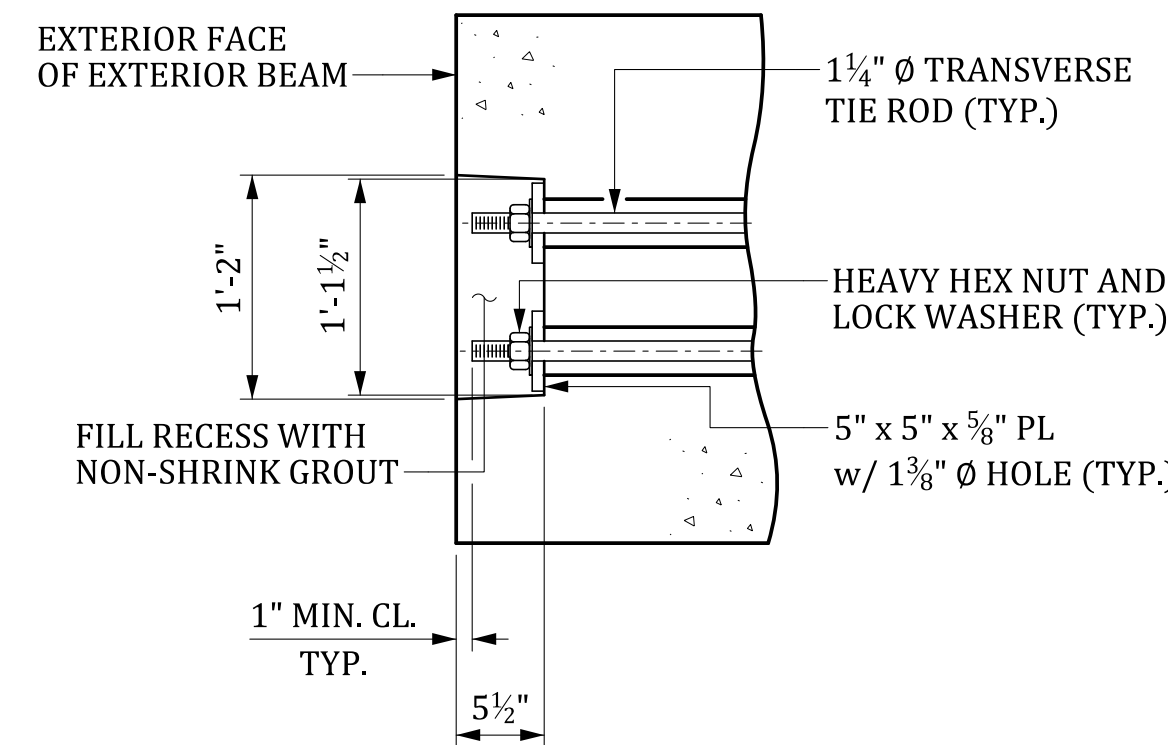
SECTION E-E

DIAPHRAGM DETAILS

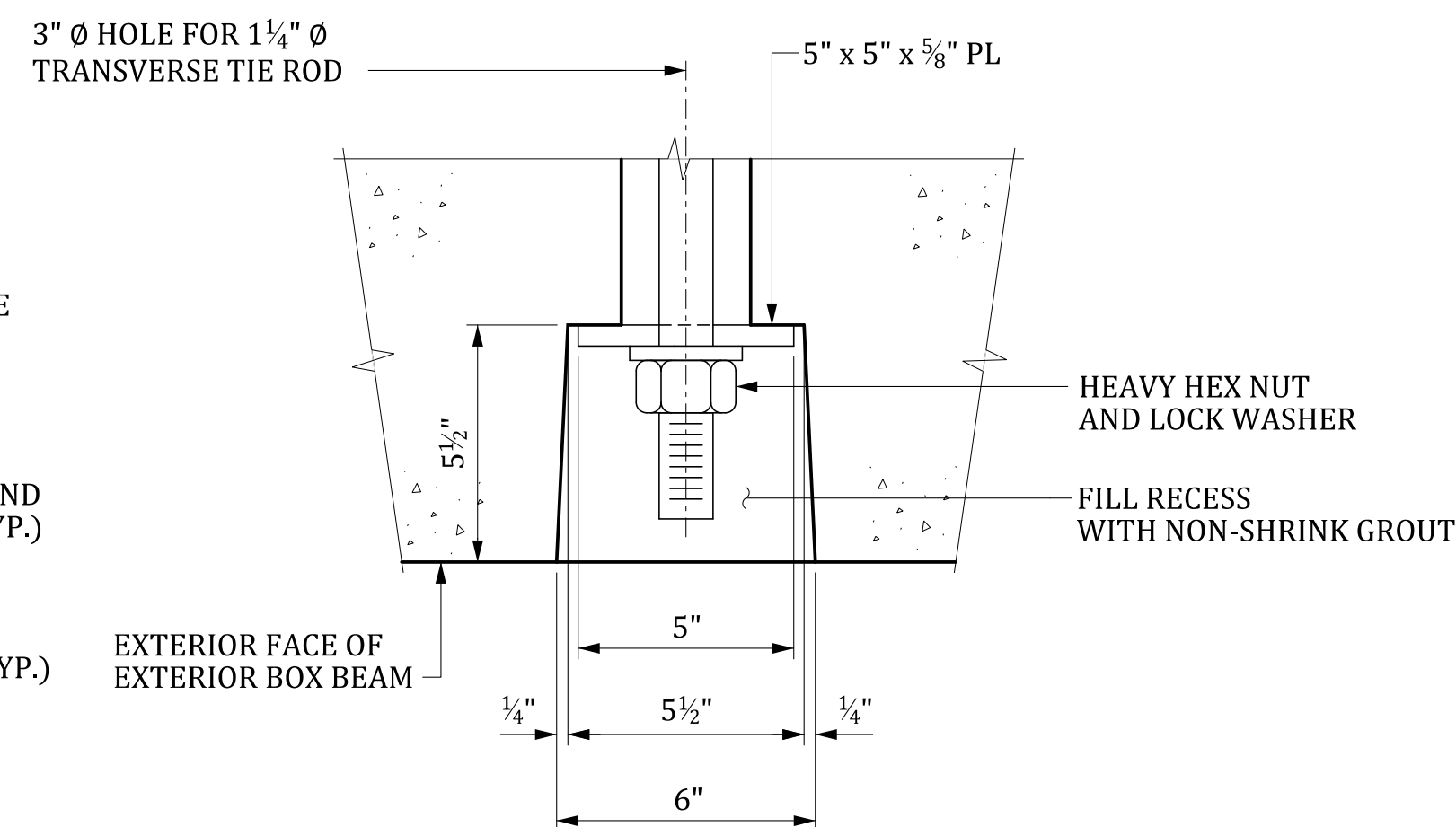
INTERIOR BOX BEAM SHOWN. SEE "TIE ROD POCKET" DETAIL BELOW FOR EXTERIOR FACE OF EXTERIOR BOX BEAM.



ELEVATION
TIE ROD ASSEMBLIES NOT SHOWN



SECTION B-B



SECTION C-C

TIE ROD POCKET DETAIL
EXTERIOR FACE OF EXTERIOR BEAM

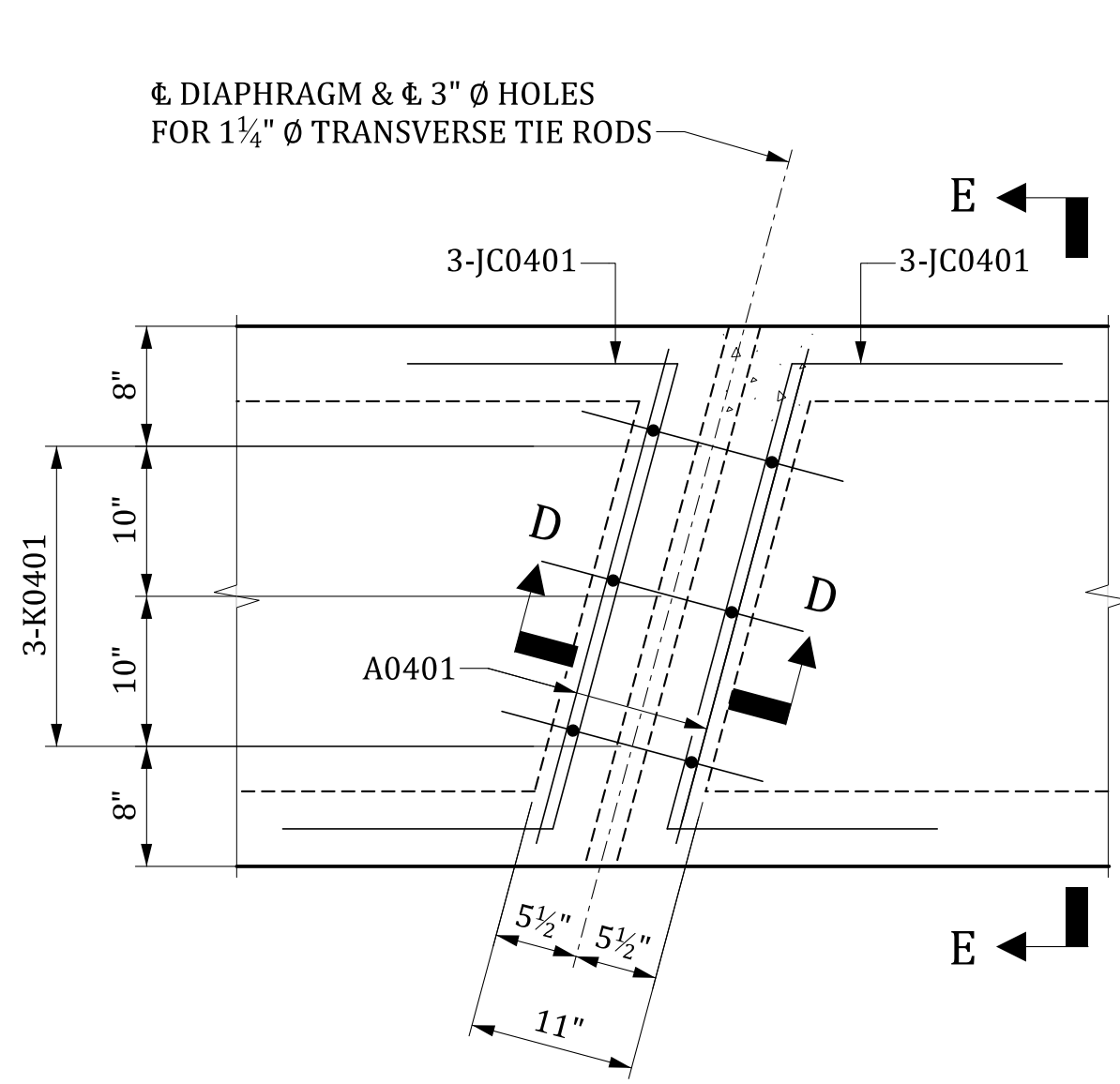
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REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

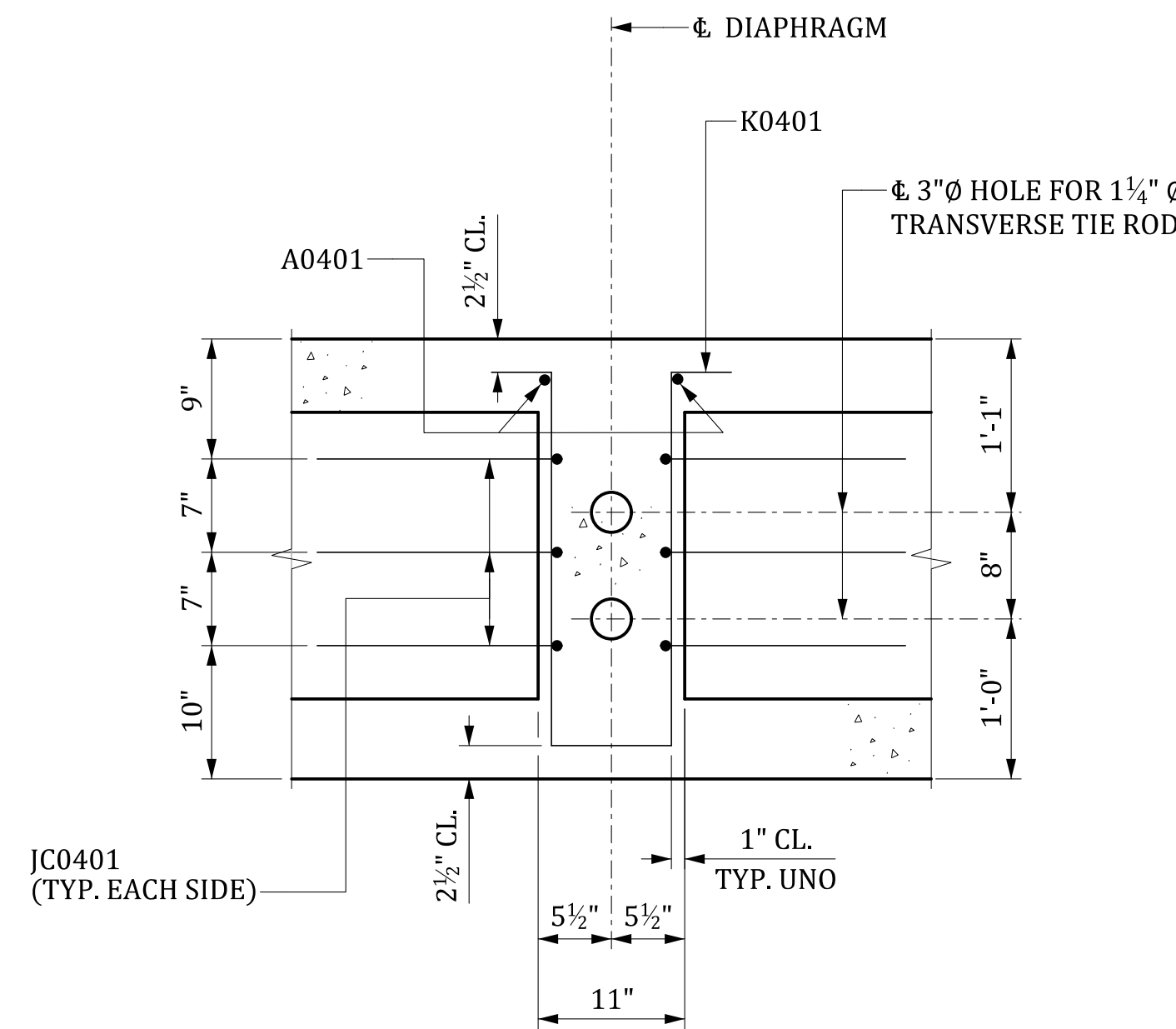
REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

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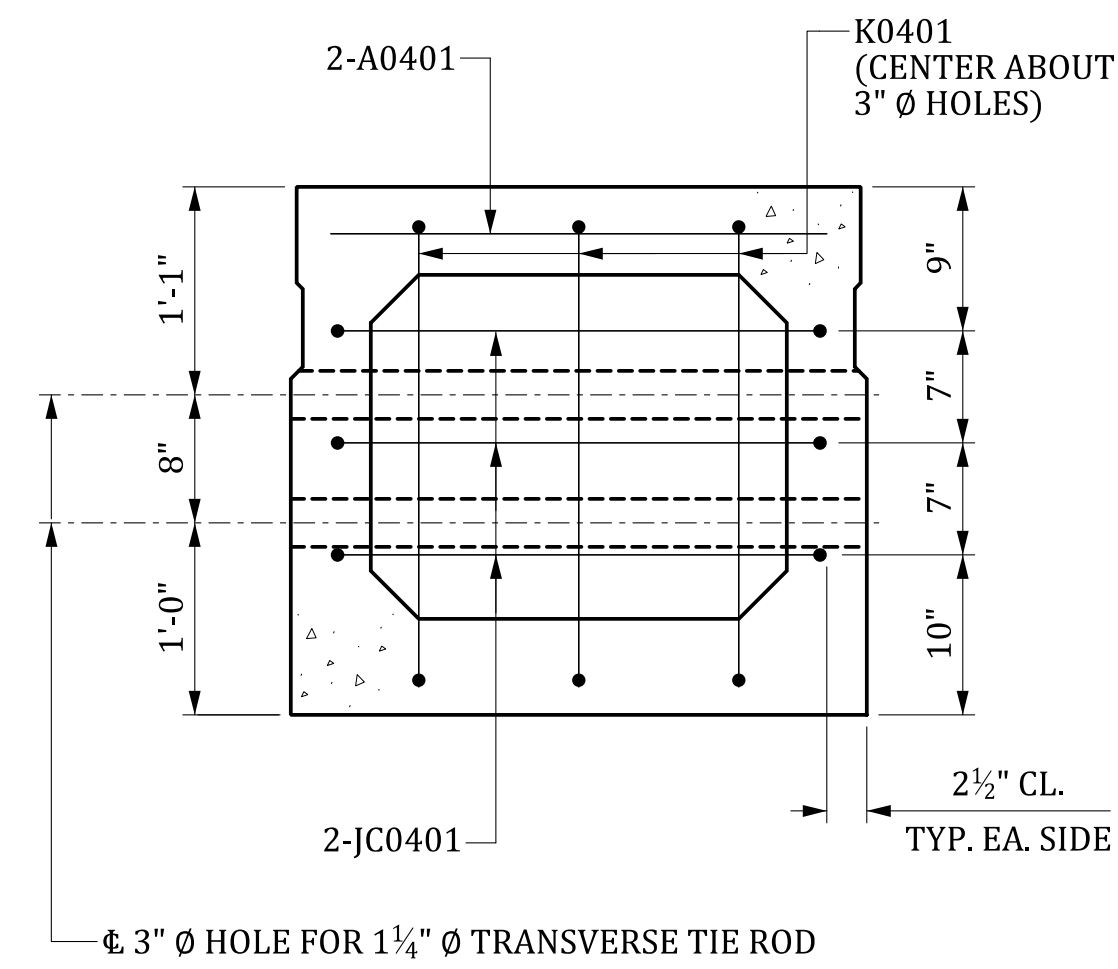
CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 80' SPAN - DETAILS 2 OF 2 (0° SKEW)	
COUNTY: ####	ROUTE: ####



PLAN



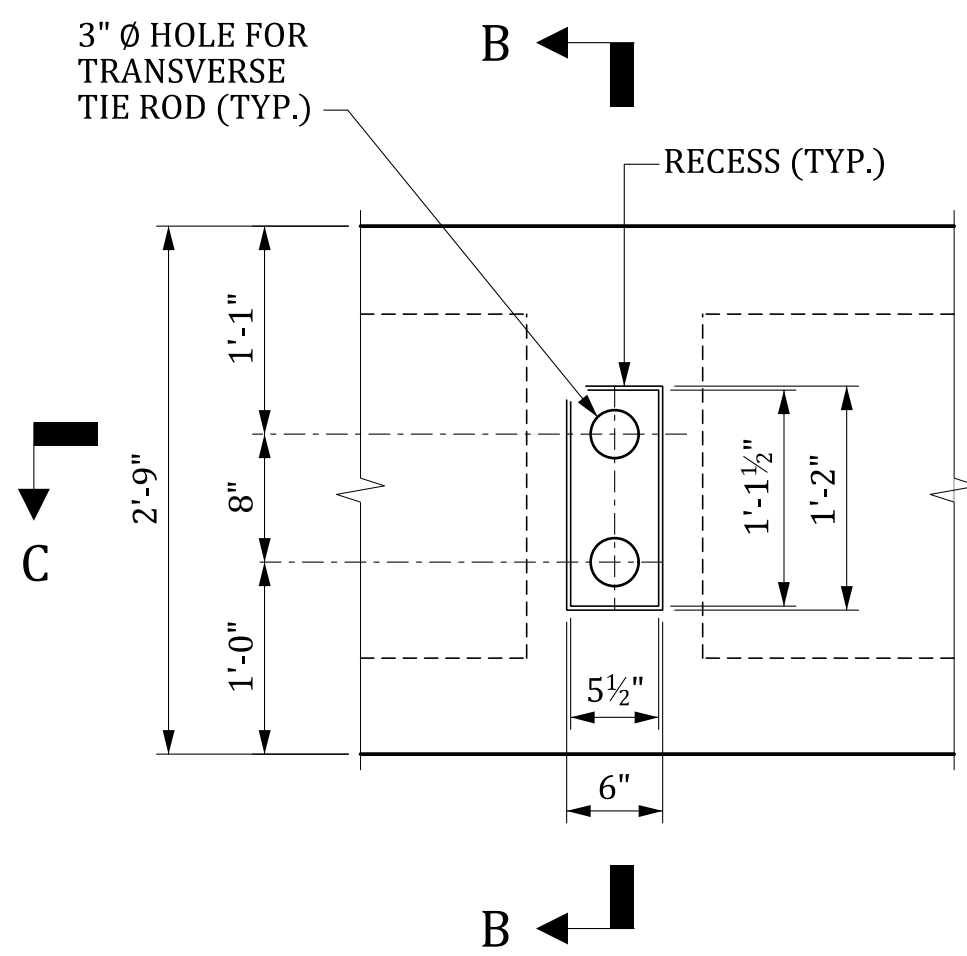
SECTION D-D



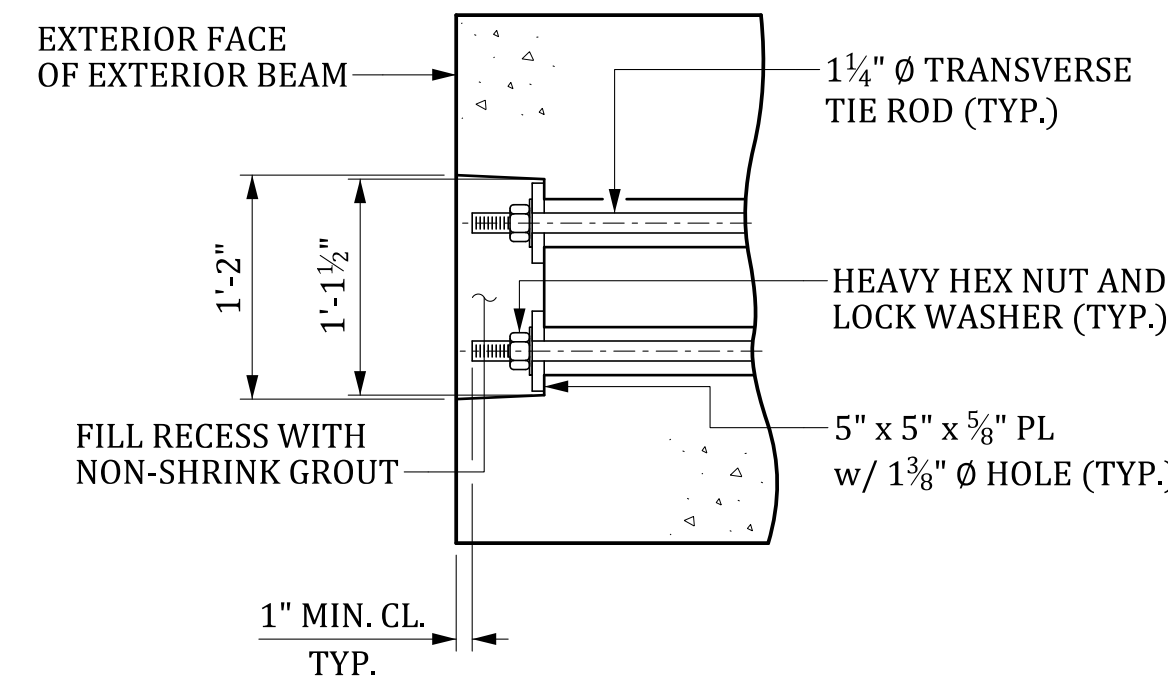
SECTION E-E

DIAPHRAGM DETAILS

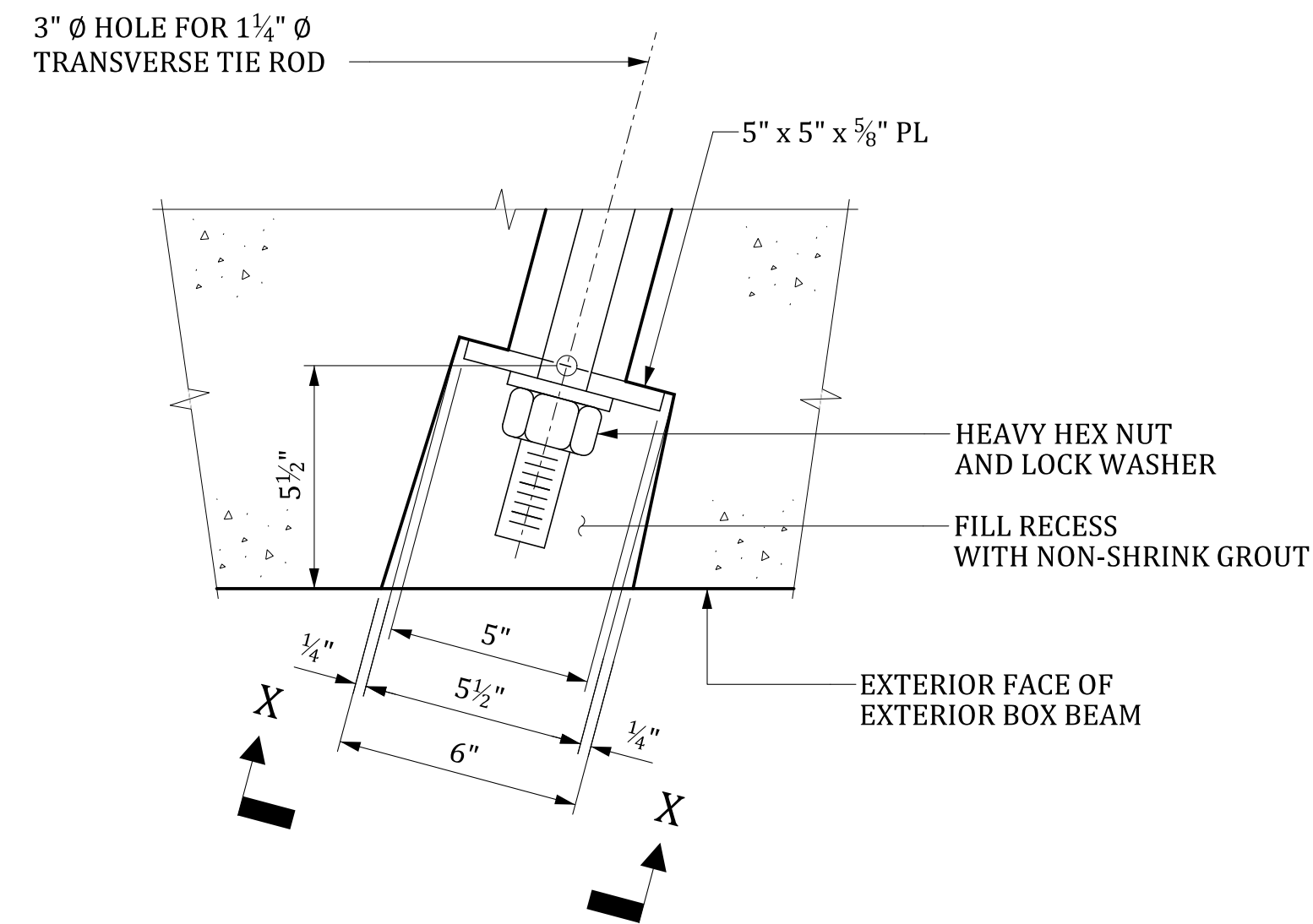
INTERIOR BOX BEAM SHOWN. SEE "TIE ROD POCKET" DETAIL BELOW FOR EXTERIOR FACE OF EXTERIOR BOX BEAM.



VIEW X-X
TIE ROD ASSEMBLIES NOT SHOWN



SECTION B-B



SECTION C-C

TIE ROD POCKET DETAIL

EXTERIOR FACE OF EXTERIOR BEAM

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

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CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 80' SPAN - DETAILS 2 OF 2 (+15° SKEW)	
COUNTY: ####	ROUTE: ####